

Birth Spacing: Research Update

NEW BIRTH SPACING RESEARCH SHOWS THAT THREE TO FIVE YEAR INTERVALS SAVE MORE LIVES THAN TWO YEAR INTERVALS OR LESS

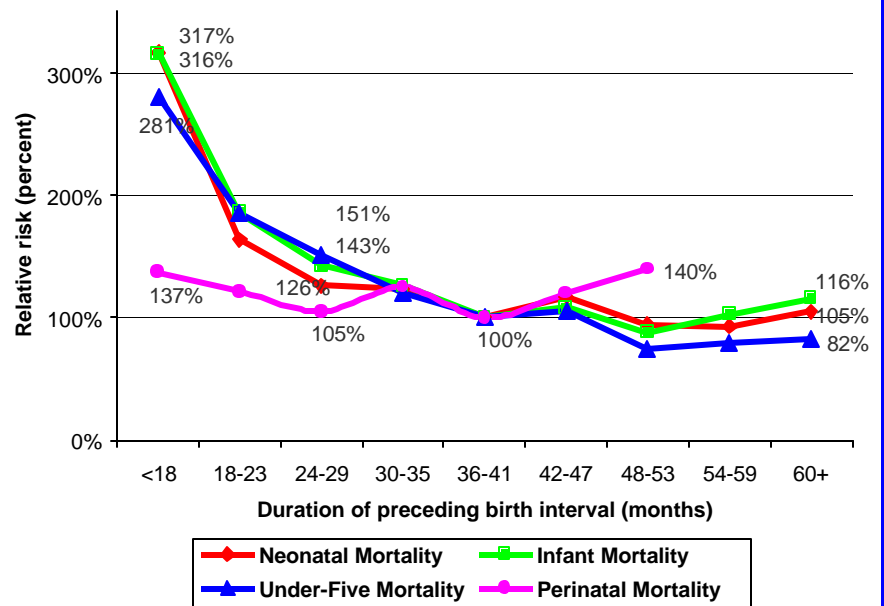
Infant Mortality

Compared to 24 to 29 month birth intervals, 36 to 41 month intervals are associated with the following percentage reduction in risk:

- 26% reduction in neonatal deaths,
- 43% reduction in infant deaths, and
- 51% reduction in under-five deaths.

Risks increase for neonates and infants after 60 months, and for perinates after 42 months. The best evidence indicates that 3 to 5 year intervals are associated with the *lowest* risk of death among children.

Figure 1. Risk of death among under-five children with a preceding birth interval of 36-41 months compared to risk of death at other birth intervals



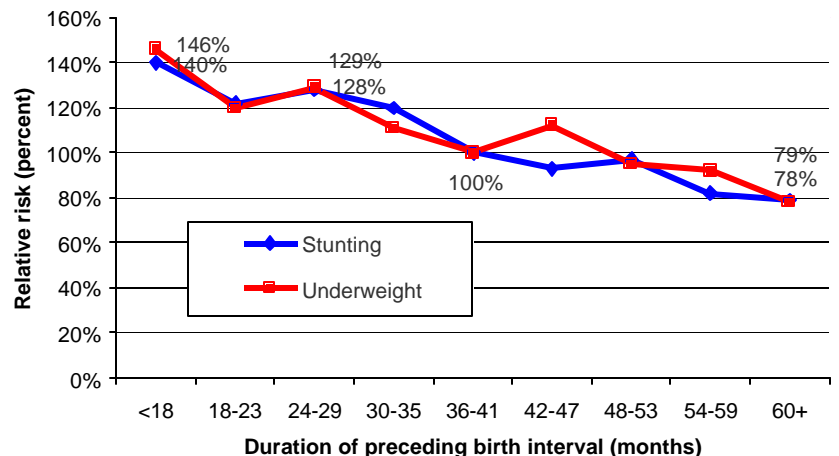
Nutritional Status

Longer birth intervals are associated with nutritional status improvements. Compared to 24 to 29 month intervals, 36 to 41 month intervals are associated with a:

- 28% reduction in stunting, and
- 29% reduction in underweight.

Birth intervals longer than 41 months are associated with *additional* reduction in risk.

Figure 2. Three year intervals, or longer, are associated with lowest risk of stunting and underweight among under-five children



Maternal Mortality

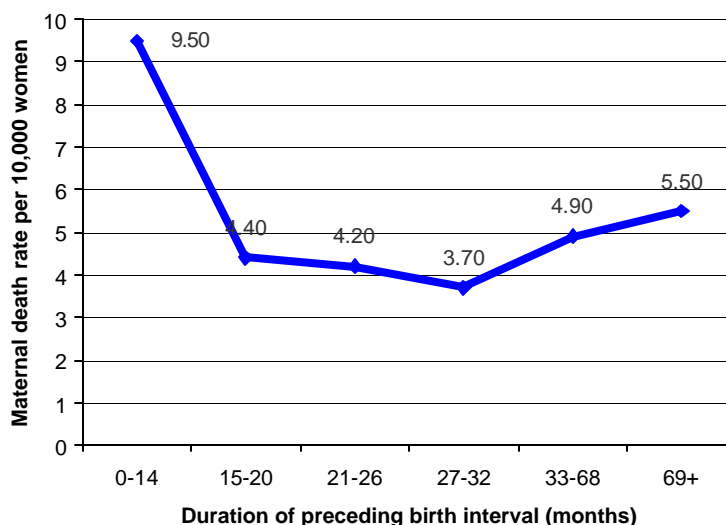
Birth intervals of 9 to 14 months are associated with increased risk of:

- maternal death (250%),
- third trimester bleeding (70%),
- premature rupture of membranes (70%), and
- anemia (30%)

compared to 27 to 32 month birth intervals. Intervals longer than 69 months are associated with increased risk of:

- maternal death (10%),
- third trimester bleeding (10%),
- eclampsia (80%), and
- postpartum hemorrhage (90%).

Figure 3. Risk of Maternal Death by Length of Birth Interval



Source: Conde-Agudelo and Belizán, Maternal Morbidity and Mortality Associated with Interpregnancy Interval: Cross Sectional Study, *British Medical Journal*, 18 November 2000. <http://bmj.com/cgi/content/full/321/727/1255>

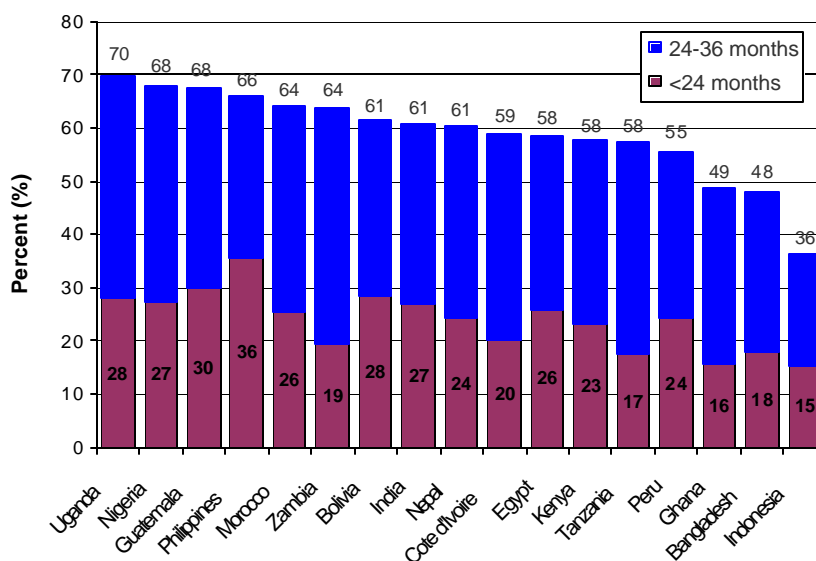
Magnitude of the Problem

DHS data confirm that many women desire longer intervals. Yet, in most developing countries, more than 50% of non-first births occur less than 36 months after the previous birth.

In Less Developed Countries (excluding China), if no births occurred before 36 months of a preceding birth:

- infant mortality rate would drop by 24%,
- under five mortality rate would drop by 35%, and
- deaths to children under five years of age would fall by 2,875,000 **annually**.

Figure 4. Percent of Birth Intervals that are Short: Select Developing Countries



¹ Unless otherwise noted, all data drawn from: Rutstein, Shea, *Effects of Birth Interval on Mortality and Health: Multivariate Cross-Country Analysis*, MACRO International, Presentation at USAID, July 2000. These and other analyses are summarized in: Setty-Venugopal, V. and Upadhyay, U.D. *Birth Spacing: Three to Five Saves Lives*. **Population Reports**, Series L, No. 13. Baltimore, Johns Hopkins Bloomberg School of Public Health, Population Information Program, Summer 2002.